STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements

Case 98-C-1357

PANEL TESTIMONY OF BELL ATLANTIC - NEW YORK
ON COSTS AND RATES FOR
ADSL/HDSL-COMPATIBLE LOOPS AND DIGITAL-DESIGNED LOOPS

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1   DSL that BA-NY submitted to the FCC, and are covered by general

2   Infospeed rates, not in separately identified qualification charges.

3   The extent to which CLECs will incur conditioning costs depends

4   upon the terminating electronics that they choose to use and the ex-

5   tent to which they are willing to limit their offerings to customers

6   whose loops meet certain requirements. BA-NY has chosen, at least

7   for the present, to limit its own retail offering to loops of 15,000 feet or

8   less that do not require any conditioning, and accordingly does not in-

9   cur any conditioning costs. Other carriers may choose to offer their

10   DSL-based services to a wider range of customers, and if they do,

11   they may incur conditioning costs that BA-NY does not incur.

12   **A.   THE QUALIFICATION PROCESS**

13   Q.   Please provide an overview of the loop qualification process.

14   A.   The primary means by which CLECs can obtain loop qualification in-

15   formation is by submitting queries to BA-NY's automated loop qualifi-

16   cation database (the "Database"). This Database supports both BA-

17   NY's retail service and the provision of unbundled ADSL/HDSL-

18   compatible links to CLECs.

19   Since the Database is still in the process of being built on a central-

20   office-by-central-office basis, in some cases a loop on which a CLEC

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1   wishes to offer an xDSL-based service may not yet be included in the

2   Database. Alternatively, if the Database shows that the loop does not

3   qualify, the CLEC may wish to determine *why* it is not qualified (*e.g.*,

4   the presence of load coils, the presence of Digital Loop Carrier

5   ["DLC"] equipment, or excessive loop length). (The particular infor-

6   mation that a CLEC may need to qualify a loop for its own services

7   depends on the nature of those services, and in particular on the

8   technical characteristics of the terminating electronics that the CLEC

9   chooses to use.) In such case, additional information can be

10   provided through a Manual Loop Qualification process. Further

11   information that may be of interest to CLECs offering specialized

12   services, such as cable gauges and the location of load coils, is

13   available through the Engineering Query process.

14   A CLEC that is offering services comparable to BA-NY's retail serv-

15   ices should be able to get all of the qualification information it needs

16   from the Database (provided that the Database has been created for

17   the central office in question). The Manual Loop Qualification and

18   Engineering Query processes recognize the fact that CLECs may

19   wish to offer services with more stringent technical requirements than

20   Infospeed DSL.

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1 Q. What charges are proposed for the qualification function?

2 A. A recurring Mechanized Loop Qualification charge, applicable to all

3 loops used to offer xDSL-based services, is proposed to recover a

4 pro rata share of the costs incurred in the creation and maintenance

5 of the Database. Non-recurring charges imposed on the requesting

6 carrier are proposed to recover the costs of Manual Loop

7 Qualification and Engineering Query.

8 **1. Mechanized Loop Qualification**

9 Q. What information can a CLEC obtain from the Database and how is it

10 obtained?

11 A. A CLEC can submit a query to the Database through BA-NY's stan-

12 dard Operations Support System wholesale interfaces, including both

13 EDI and the Web GUI. The query may identify the loop in question

14 by telephone number or address. The principal loop qualification

15 information that is available from the Database and that would be of

16 interest to CLECs is the total metallic loop length (including bridged

17 taps), as determined by an MLT test.[13] The Database will also

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[13] An MLT test determines the effective length of a loop by measuring its capacitance. The process involves sending a voltage pulse from testing equipment located in an MLT test center, through a central office switch port, and down the loop being tested. Only working loops, *i.e.*, loops connected to a switch port and provided with dialtone, can be MLT-tested.

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1   Database will also indicate, however, whether or not the loop is

2   qualified for the offering of Infospeed DSL service. (A loop is deemed

3   qualified for Infospeed DSL if the total loop length, including bridged

4   tap, is less than 15,000 feet, if the loop is *not* served by DLC, and if

5   T1 is absent from the loop's binder group.[14])

6   It should be noted that although the Database is accessed by

7   entering a particular telephone number or address, the loop

8   qualification information is generated and stored on a terminal-by-

9   terminal basis. The information returned from the Database indicates

10   whether qualified loops are available within the terminal serving the

11   specific location in question.

12   Q.   How is the Database being created?

13   A.   The creation of the Database for a particular terminal involves MLT

14   testing of a sample of the loops in that terminal. The testing is carried

15   out on an automated, bulk-testing basis that greatly reduces the time

16   and cost per test. The loop-length information obtained from the MLT

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[14] A "binder group" is a bundle of pairs, typically twenty-five, that are adjacent to each other within a cable. Transmission of T1 signals can interfere with xDSL transmission in nearby pairs, and *vice versa*.

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1		test is then associated in the database with the telephone number
2		and address of each of the loops served by that terminal.[15]
3		On an ongoing basis, the Database will be updated to reflect any
4		changes in loop qualification information resulting from modifications
5		or rearrangements to loop facilities (*e.g.*, the upgrading of a particular
6		loop from copper to DLC).
7	Q.	How many offices are currently included in the Database?
8	A.	By the end of 1999, over 90 percent of offices with a CLEC colloca-
9		tion presence are scheduled to be included in the Database. The ef-
10		fort of including *all* New York offices in the Database is expected to
11		be completed within five years. Priority is being given to offices
12		based on BA-NY's proposed roll-out of retail Infospeed service, the
13		presence of CLEC collocation, and specific CLEC forecasts for the
14		offering of their own xDSL-based services.
15	Q.	Is BA-NY considering the inclusion of additional loop qualification in-
16		formation in the Database?

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[15] A preliminary step in the bulk testing process is generating a file listing the loops to be tested. Terminals that contain T1 in the binder group or that have less than a specified percentage of non-DLC loops are excluded from these files. Thus, loops in such terminals are not MLT-tested, and the terminals are simply recorded in the Database as non-qualified.

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1 A. Yes. As currently configured, the Database does not indicate why a

2   particular loop is unqualified for Infospeed (*i.e.*, whether the lack of

3   qualification is due to excessive length, or the fact that the loop con-

4   tains a DLC system, or the fact that the loop is in a binder group with

5   a cable being used for T1 transmission). Starting in the first quarter

6   of 2000, the Company plans to add additional fields to the Database

7   to include this information. These fields will be populated for newly-

8   qualified offices on an ongoing basis. For offices already in the Data-

9   base, the fields will be populated for terminals tested pursuant to the

10   Manual Loop Qualification process, as such manual testing is com-

11   pleted.

12 Q. Why doesn't the Database include *all* information that might be of in-

13   terest to CLECs intending to offer ADSL/HDSL-based services, and

14   that currently must be obtained through the Manual Loop

15   Qualification or Engineering Query processes?

16 A. Obtaining information on cable gauges, load coil locations, etc., for *all*

17   of BA-NY's loops — and using it to populate a greatly expanded da-

18   tabase — would require a massive and highly expensive effort.

19   Paper records ("cable plats") would have to be reviewed for literally

20   millions of loops. This would greatly expand the cost of the Database

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1 for all carriers, including those whose chosen technologies do not

2 require such detailed information. In contrast, under BA-NY's less

3 extravagant approach, unnecessary costs are not incurred to review

4 cable plats for loops that may never be used to offer xDSL-based

5 services. Moreover, under BA-NY's approach, the costs of paper-

6 record-review would be imposed in a cost-causative manner only on

7 those CLECs whose services require the additional information.

8 Q. What charges are associated with the Database?

9 A. BA-NY has proposed a Mechanized Loop Qualification Charge. This

10 is a recurring charge, imposed on all ADSL-capable loops ordered by

11 CLECs. (The associated cost is also identified as a cost of all loops

12 used to provide Infospeed DSL service, and is covered by the retail

13 rate for such service.)[16]

14 The Mechanized Loop Qualification Charge would not be imposed on

15 loops served by central offices that are not included in the Database

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[16] The charge is not based on the actual (*i.e.*, historical) costs of creating and maintaining the Database, but rather on the estimated, forward-looking costs of the functions involved in Database creation and maintenance. Moreover, with respect to Database creation, *only* the costs associated with MLT testing are recovered in the charge. Any additional costs (for example, the costs associated with excluding from MLT test files loops equipped with DLC technology or loops located in binder groups with T1 facilities) are not recovered in the wholesale charge.

The development of the Mechanized Loop Qualification charge is discussed in detail later in this testimony.

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1   at the time of the CLEC request. It also would not be imposed on

2   CLECs that choose not to consult the Database prior to ordering an

3   ADSL/HDSL-compatible loop or DDL.

4 Q.   What activities are involved in Database maintenance?

5 A.   The activities involved in Database maintenance are related to pro-

6   gram changes, loading and extracting data, and the updating of the

7   records in the database performed by engineers in the Facilities Man-

8   agement Center ("FMC"). In general, these activities will be con-

9   ducted on an ongoing basis as a consequence of changes in

10   facilities, growth in loop plant, and CLEC requests for additional

11   information not originally included in the Database.

12   This expense is in no way related to the computer-operations, soft-

13   ware-development, and database management type expenses as-

14   signed for recovery through Annual Cost Factors ("ACFs") under such

15   USOA Accounts as 6724 (Information Management).

16   **2.   Manual Loop Qualification**

17 Q.   What information is available through the Manual Loop Qualification

18   process?

19 A.   Information available through Manual Loop Qualification process in-

20   cludes: (a) total metallic loop length (inclusive of bridged tap), (b)

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